

Appl. No.: 10/064,511
Docket No.: 122938 / GEM-0012

REMARKS / ARGUMENTS

Status of Claims

Claims 1, 2, 5-13, 17, 18, 21-29 and 32-36 are pending and stand rejected. Claims 33 and 35 are objected to. Applicant has canceled Claims 8, 10, 11, 24, 26 and 27, and has amended Claims 1, 17, 32, 33 and 35, leaving Claims 1, 2, 5-7, 9, 12, 13, 17, 18, 21-23, 25, 28, 29, and 32-36 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

These amendments and accompanying remarks were not presented earlier because Applicant did not fully appreciate the nature of the Examiner's position until the Applicant was further advised of the position by the final rejection. The claim amendments presented herein, which Applicant respectfully requests entry thereof, should only require a cursory review by the Examiner.

Objections to the Claims

The Examiner has objected to Claims 33 and 35 because of the use of the phrase "adapted to", and has requested correction thereof. However, the Examiner has not stated with specificity why the phrase "adapted to" is objectionable, and has not cited any section of the code, rules, or procedures, in support of such objection.

In respectful disagreement with the Examiner, Applicant submits that the phrase "adapted to" is not per se objectionable. In fact, in *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976), the Court held that limitations such as "...members *adapted to* be positioned..." serve to precisely define present structural attributes of interrelated component parts of the claimed assembly. MPEP 2173.05(g). (Emphasis added).

As claimed in the instant application, the phrase "adapted to" is used in context with a processing device, which includes circuitry adapted to perform the claimed elements.

Appl. No.: 10/064,541
Docket No.: 122938 / GEM-0042

Accordingly, Applicant respectfully requests reconsideration and withdrawal of this objection.

Rejections Under 35 U.S.C. §102(b)

Claims 1, 2, 5-12 and 32-36 stand rejected under 35 U.S.C. §102(b) as being anticipated by Gono et al. (U.S. Patent No. 5,873,826, hereinafter Gono).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, *in a single prior art reference.*" *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the *** claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements "arranged as in the claim." *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

Applicant has amended independent Claims 1, 32, 33 and 35, to include the elements of original Claims 8, 10 and 11, that were dependent from Claim 1 and are now canceled. Applicant has further amended Claims 1, 32, 33 and 35, to more specifically describe the subject matter considered to be the invention.

As claimed, Claims 1, 32, 33 and 35, now include the elements of:

"...in response to said first radiation distribution, controlling said radiation intensity such that said radiation intensity is **decreased relative to said first average radiation distribution by a predetermined minimization amount** when said gantry angular position is within said entry angular range, and controlling said radiation intensity such that said radiation intensity is **increased relative to said first average radiation**

Appl. No.: 10/064,541
Docket No.: 122938 / CIM-0042

distribution by the predetermined minimization amount when said gantry angular position is at about 180 degrees relative to said entry angular range; and

in response to said second radiation distribution, controlling said radiation intensity such that said radiation intensity is decreased relative to said second average radiation distribution by a predetermined minimization amount when said gantry angular position is within said entry angular range, and controlling said radiation intensity such that said radiation intensity is increased relative to said second average radiation distribution by the predetermined minimization amount when said gantry angular position is at about 90 degrees relative to said entry angular range."

Dependent claims inherit all of the limitations of the respective parent claim.

Here, Applicant is claiming a method for reducing radiation exposure that involves an average radiation distribution 44, a decrease of radiation intensity 48 **relative to the average radiation distribution 44 by a predetermined amount** when the gantry angular position is at the entry angular range 40, and an increase of radiation intensity 48 **relative to the average distribution 44 by the predetermined amount** (the predetermined amount as defined by the decrease) when the gantry angular position is at about 180 or 90 degrees relative to the entry angular range 40. In this manner, the noise level of the image may be compensated for by amplification of the emitter tube current at the opposing angle (180 degree for 360 degree reconstruction) or the perpendicular angles (+/- 90 degrees for 180 degree reconstruction), which Applicant submits is not recognized as a concern in Gono. Support for this amendment may be found in the original Claims 8, 10 and 11, in the specification as originally filed at Paragraphs [0030-0032], and at Figures 4B and 5. No new matter has been added.

The Examiner alleges that Gono discloses controlling the radiation such that the radiation intensity is decreased by a predetermined minimization amount, and such that the radiation intensity is increased by a predetermined minimization amount, by making reference to Figure 9 and the tube current of 200 mA. Paper 062004, pages 3-4.

In comparing Gono with the instant invention, Applicant finds Gono as referenced to be absent any disclosure of the radiation intensity being decreased **relative to an**

Appln. No.: 10/064,541
Docket No.: 122938 / GIM-0042

average radiation distribution by a predetermined minimization amount, and the radiation intensity being increased relative to the average radiation distribution by the predetermined minimization amount, at an opposing or perpendicular angular position.

The Examiner further alleges that Gono discloses the first and second average radiation distributions being about constant throughout the scan, asserting that an average is a constant. Paper 062004, page 3.

If Applicant accepts the Examiner's view that Gono discloses an average radiation distribution, and that Gono discloses a decrease and an increase of the radiation intensity (each of the decrease and the increase corresponding to a tube current of 200 mA), it necessarily follows that Gono cannot disclose the radiation intensity being decreased or increased **relative to an average radiation distribution by the same predetermined amount**, since this would require Gono to disclose a decrease relative to an average and an increase relative to an average, which Gono does not do. At best, and with Reference to Figure 9, Applicant submits that Gono discloses a radiation intensity decrease corresponding to a tube current change from 200 mA of 0 mA, and a radiation intensity increase corresponding to a tube current change from 0 mA to 200 mA, which is substantially different from a decrease and an increase in radiation intensity **relative to an average radiation distribution by the same predetermined amount**, as claimed in the instant invention.

In view of the amendment and foregoing remarks, Applicant submits that Gono does not disclose each and every element of the claimed invention and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw this rejection.

Rejections Under 35 U.S.C. §103(a)

Claims 17, 18 and 21-28, stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gono in view of Zmora (U.S. Patent No. 6,028,909, hereinafter Zmora).

Appl. No.: 10/064,541
Docket No.: 122938 / GI/M-0042

Claims 13 and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gono in view of Zmora as applied to Claims 12 and 18 (28?) above, and further in view of Popescu (U.S. Patent No. 5,822,393, hereinafter Popescu).

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

Applicant has amended Claim 17 to include the elements introduced in amended Claims 1, 32, 33 and 35.

Dependent claims inherit all of the limitations of the parent claim.

Accordingly, for all of the reasons set forth above with regard to the rejections under 35 U.S.C. §102(a), Applicant submits that Gono does not teach each and every element of the claimed invention, and that Zmora and Popescu fail to cure this deficiency.

In view of the foregoing, Applicant submits that the References fail to teach or suggest each and every element of the claimed invention and disclose a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

In light of the foregoing remarks and amendments, Applicant respectfully submits that the proposed amendments and arguments comply with 37 C.F.R. §1.116 and should therefore be entered, and with their entry that the Examiner's rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, and that the application is now in condition for allowance. Such action is therefore respectfully requested.

Appl. No.: 10/064,541
Docket No.: 122938 / GFM-0042

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 07-0845.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above identified Deposit Account.

Respectfully submitted,

CANTOR COLBURN LLP

Applicant's Attorneys

By: 

David Arnold
Registration No: 48,894
Customer No. 23413

Address: 55 Griffin Road South, Bloomfield, Connecticut 06002
Telephone: (860) 286-2929
Fax: (860) 286-0115

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.